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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,765	01/19/2005	Masahiro Ishikawa	2005-0023A	2676

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EXAMINER

TSAY, MARSHA M

ART UNIT PAPER NUMBER

1653

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/521,765

Applicant(s)

ISHIKAWA ET AL.

Examiner

Marsha M. Tsay

Art Unit

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/23/05</u> | 6) <input type="checkbox"/> Other: _____ |

This Office action is in response to Applicants' remarks received February 10, 2006. Claims 1-9 are pending and currently under examination.

Priority: The priority date is July 19, 2002.

Withdrawal of Objections and Rejections

The objection to the specification because of minor informalities is withdrawn.

The rejection of claims 1-4, 6-7 under 35 U.S.C. 102(b) as being anticipated by Renkema et al. (2000 J Biotech 79: 223-230: IDS) is withdrawn.

The rejection of claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over Renkema et al. (2000 J Biotech 79: 223-230: IDS) in view of Makoto et al. (JP 11308969; IDS) is withdrawn.

Objections and Rejections

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-6, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bringe (US 6171640; IDS). Bringe teaches a composition of greater than 40% of β -conglycinin (BC) protein from which the high BC composition is isolated by an acid precipitation process (col. 4, lines 40-45). In example 3, Bringe teaches the preparation

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of high BC-SPI (high β -conglycinin soy protein isolate), low BC-SPI and control-SPI (col. 22, line 35). In section C, the BC-SPI is isolated by an acid precipitation process followed by heat-treatment (col. 23, line 49). The protein solution was adjusted to pH 4.5 +/- 0.1 and allowed to react at 45°C (col. 23 lines 59-61; claims 1, 2). In example 4, Bringe teaches composition, solubility, and color of soybeans of the BC-SPI compositions (col. 24, line 50). In Table 4, the BC-SPI-acid-ha treated at 72°C and 90°C have a solubility of 96% and 95%, respectively (col. 26; claims 4, 6). The high β -conglycinin compositions can be used in a variety of food products including beverages, cheese, soymilk, tofu products (abstract, col. 39, lines 30-40; claims 5, 8).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bringe (US 6171640; IDS). The teachings of Bringe are outlined above. Bringe does not specifically teach a heating step at 75°C but lower than 160°C under acidic conditions of pH 4.0 to 5.6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat a solution of high BC-SPI, wherein the β -conglycinin content is 40% or greater, under acidic conditions, i.e. pH 4.5, at 72°C or 90°C because

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Bringe disclose the heat treatment of a soy protein solution containing greater than 40% by weight of β -conglycinin at 72°C or 90°C after acidic treatment (col. 26 table 4; claims 3, 7, 9). The motivation to do so is given by Bringe, which teaches the heat treatment of a soy protein solution containing greater than 40% by weight of β -conglycinin at 70°C or 90°C results in a protein solubility of 96% and 95%, respectively.

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

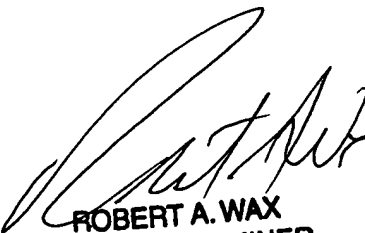
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marsha M. Tsay whose telephone number is 571-272-2938. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 17, 2006



ROBERT A. WAX
PRIMARY EXAMINER